

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-23. (canceled)

24. (withdrawn) A method for the prevention or treatment of Alzheimer's disease (AD) in a subject having or suspected of having AD, comprising administering to said subject a therapeutically effective amount of a non-wild type protofibril, wherein said non-wild type protofibril comprises the A β 42-Arc peptide (SEQ ID NO:1).

25-26. (canceled)

27. (currently amended) A method for the prevention or treatment of Alzheimer's disease (AD) in a subject having or suspected of having AD, comprising ~~administration~~ administering to said subject a therapeutically effective amount of an antibody wherein said antibody is raised against a protofibril comprising an A β -Arc peptide comprising a mutation Glu₂₂-Gly₂₂.

28-31. (canceled)

32. (previously presented) The method according to claim 27, wherein said antibody is monoclonal.

33. (previously presented) The method according to claim 27, wherein said antibody is human or humanized.

34-38. (canceled)

39. (withdrawn) A method for the prevention or treatment of Alzheimer's disease (AD) in a subject having or suspected of having AD, comprising administering to said subject a therapeutically effective amount of a non-wild type protofibril, wherein said protofibril comprises the peptide selected from the group consisting of A β 39-Arc (Amino Acids 1-39 of SEQ ID NO:1), A β 40-Arc (Amino Acids 1-40 of SEQ ID NO:1), A β 41-Arc (Amino Acids 1-41 of SEQ ID NO:1), A β 42-Arc (SEQ ID NO:1), and combinations thereof.

40. (withdrawn) The method according to claim 39, wherein said protofibril is in combination with a mutation selected from the group consisting of the Dutch, Flemish, Italian, Iowa mutations, and combinations thereof.

41. (withdrawn) A method for the prevention or treatment of Alzheimer's disease (AD) in a subject having or suspected of having AD, comprising administering to said subject a therapeutically effective amount of a non-wild type protofibril, wherein said protofibril comprises a mutated A β peptide comprising the mutation Glu₂₂ \rightarrow Gly₂₂.

42. (withdrawn) The method according to claim 41, wherein said protofibril is in combination with a mutation selected from the group consisting of the Dutch, Flemish, Italian, Iowa mutations, and combinations thereof.

43. (withdrawn) The method according to claim 27, wherein said A β -Arc peptide is selected from the group consisting of A β 39-Arc (Amino Acids 1-39 of SEQ ID NO:1), A β 40-Arc (Amino Acids 1-40 of SEQ ID NO:1), A β 42-Arc (SEQ ID NO:1), and combinations thereof.

44. (currently amended) A method for the prevention or treatment of Alzheimer's disease (AD) in a subject having or suspected of having AD, comprising administration administering to said subject a therapeutically effective amount of an antibody, wherein said antibody is raised against a protofibril comprising an A β -Arc peptide selected from the group consisting of A β 39-Arc (Amino Acids 1-39 of SEQ ID NO:1), A β 40-Arc (Amino Acids 1-40 of SEQ ID NO:1), A β 41-Arc (Amino Acids 1-41 of SEQ ID NO:1), A β 42-Arc (SEQ ID NO:1), and combinations thereof.

45. (currently amended) The method according to claim 44, wherein said protofibril is in combination with a further comprises an A β peptide having a mutation selected from the group consisting of the Dutch, Flemish, Italian, Iowa mutations, and combinations thereof.

46. (cancelled)

47. (previously presented) The method according to claim 27, wherein said antibody is raised against a protofibril comprising an A β -Arc peptide and said A β -Arc peptide is selected from the group consisting of A β 39-Arc (Amino Acids 1-39 of SEQ ID

NO:1), A β 40-Arc (Amino Acids 1-40 of SEQ ID NO:1), and A β 42-Arc (SEQ ID NO:1).

48. (currently amended) The method according to claim 27, wherein ~~said antibody is raised against a protofibril comprising an A β -Arc peptide and said protofibril is in combination further comprises an A β peptide with a mutation selected from the group consisting of the Dutch, Flemish, Italian and Iowa mutations.~~

49. (new) The method according to claim 44, wherein ~~said antibody is monoclonal.~~

50. (new) The method according to claim 44, wherein ~~said antibody is human or humanized.~~

51. (new) A method for the prevention or treatment of Alzheimer's disease (AD) in a subject having or suspected of having AD, comprising administering to said subject a therapeutically effective amount of an antibody, wherein said antibody is raised against a composition comprising an A β -Arc peptide selected from the group consisting of A β 39-Arc (Amino Acids 1-39 of SEQ ID NO:1), A β 40-Arc (Amino Acids 1-40 of SEQ ID NO:1), A β 41-Arc (Amino Acids 1-41 of SEQ ID NO:1), A β 42-Arc (SEQ ID NO:1), and combinations thereof.

52. (new) The method according to claim 44, wherein ~~said composition further comprises an A β peptide having a mutation selected from the group consisting of the Dutch, Flemish, Italian, Iowa mutations, and combinations thereof.~~

53. (new) The method according to claim 27, wherein said A β -Arc peptide is A β 39-Arc (Amino Acids 1-39 of SEQ ID NO:1).

54. (new) The method according to claim 27, wherein said A β -Arc peptide is A β 40-Arc (Amino Acids 1-40 of SEQ ID NO:1).

55. (new) The method according to claim 27, wherein said A β -Arc peptide is A β 41-Arc (Amino Acids 1-41 of SEQ ID NO:1).

56. (new) The method according to claim 27, wherein said A β -Arc peptide is A β 42-Arc (SEQ ID NO:1).

57. (new) The method according to claim 44, wherein said A β -Arc peptide is A β 39-Arc (Amino Acids 1-39 of SEQ ID NO:1).

58. (new) The method according to claim 44, wherein said A β -Arc peptide is A β 40-Arc (Amino Acids 1-40 of SEQ ID NO:1).

59. (new) The method according to claim 44, wherein said A β -Arc peptide is A β 41-Arc (Amino Acids 1-41 of SEQ ID NO:1).

60. (new) The method according to claim 44, wherein said A β -Arc peptide is A β 42-Arc (SEQ ID NO:1).